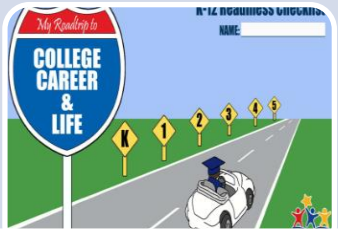
Necessary but Not Sufficient

A report by the
Arizona Ready Education Council's Graduation Rate Task Force
June 03, 2014

Redefining High School to Increase Arizona's High School Graduation Rate



Personalized Access and Progress

- Choice belongs to the student – without caps or limits
- Unfettered access to meaningful and engaging programs
- Flexible, quality options for re-engaged dropouts

Rigorous Models

- High expectations for all
- Culture of "Both/And" for college prep and CTE
- Nationally-recognized industry credentials
- Opportunities for students who are not ready

Pathways Based on Interest, Aptitude, and Knowledge

- More flexible models of delivery
- Tangible career planning opportunities
- Early intervention for struggling students

Foundation: Higher Quality Early Childhood Experiences

Meeting the Challenge of Raising Arizona's High School Graduation Rate

THE CHALLENGE: Arizona's high schools represent our best chance to prepare our young people to lead successful lives as adults. That's because high school is both the last fully publicly-funded portion of our education system, and because high school students are on the cusp of adulthood. Yet today, most of our high schools and many of our high school students are not realizing the opportunity or taking responsibility for it.

Arizona High School Graduates	#	%
High school students graduating "on time"[1]	59,248	77%
High school graduates going directly to higher education[1]	31,793	54%
High school graduates completing a 2- or 4-year degree within 6 years[2]	12,954	24%
Arizona High Schools	**#**	**%**
High schools whose graduates account for more than 70% of college freshman[1]	82	17%
High schools whose graduates account for more than 50% of college graduates[2]	27	7%
High schools where none of its graduates go directly to higher education[1]	39	8%

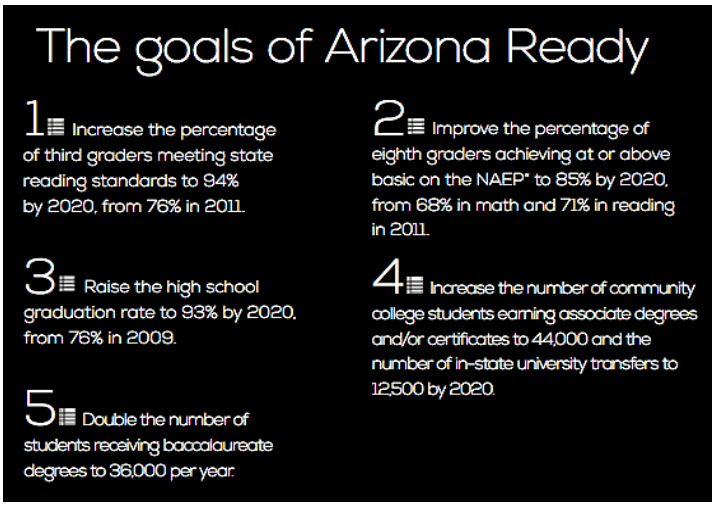
The unfortunate reality is that the vast majority of students leaving high school are not ready to succeed in college or work. Nearly one-fourth of Arizona high school students do not graduate on time, and of those who do, nearly half do not attend a two- or four-year college. Even among those who do go to college, many must take remedial courses.

In addition, most high school graduates are not prepared for the 21st century workforce. Two-thirds of the 90,000 job vacancies in Arizona each year require at least some postsecondary education and training. That adds up to 55,000 jobs that open up every year requiring training beyond high school. Yet each year, Arizona only sends 32,000 high school graduates to college, and one-fourth of those are not prepared for college-level work. Meanwhile, job seekers who have only a high school diploma struggle to find work, especially jobs that pay a living wage.

These preparedness issues are concentrated in the high schools serving the poorest students. According to the Arizona Board of Regents, in 2012, more than 70% the high school graduates who went on to a university or a community college came from just 17% of our high schools, where many students are at least middle-class. For college graduates, it is even more concentrated. A majority of Arizona's college graduates come from just 7% of Arizona's high schools. In addition, 8% of Arizona high schools did not have one graduate who went directly to college. Most students at these struggling high schools were born into poverty and are not receiving the education they need to rise out of poverty and achieve economic independence.

THE SOLUTION: One key reason students lose interest in high school, do not prepare adequately for college and a career, and often drop out of high school is a lack of **relevance**. They do not see the purpose of their classes or know what opportunities exist. They do not understand the career pathways that could help them become successful.

Arizona has several key strengths that create unique opportunities to solve these problems. We have a statewide economic plan that identifies high-skill, high-wage job opportunities for students to pursue; we have a strong culture of school choice which includes Career and Technical Education; and we have a variety of innovative educational models.



What Arizona has not done well is to create a culture of high expectations for ***all*** students to understand the value of their education. This report shows how to redefine high school to greatly increase the statewide high school graduation rate, while also preparing more students for college and a career.

[1] Arizona Board of Regents "College Going Rate of 2011-2012 Arizona High School Graduates"
[2] Arizona Board of Regents "AZ HS Class 2005-06 Postsecondary Outcomes After Six Years"

Section 1: Introduction and Background

Arizona, like many other states, struggles with the problem of students leaving high school prior to receiving a diploma. For the graduating class of 2012, nearly a quarter of the students who began attending public high schools in the fall of 2008 were not celebrating with their peers on graduation night. This translates into over 18,000 young Arizonans who did not graduate on time – and this is for just one graduating class. While some of these students will return to the public school system to complete their education, and others will earn an equivalent degree, many more will be set adrift in a society and an economy in which earning a high school diploma and then going on to postsecondary training or education is increasingly the ***minimum*** requirement for leading a satisfying and productive life.

Arizona Graduation Rates and Trends

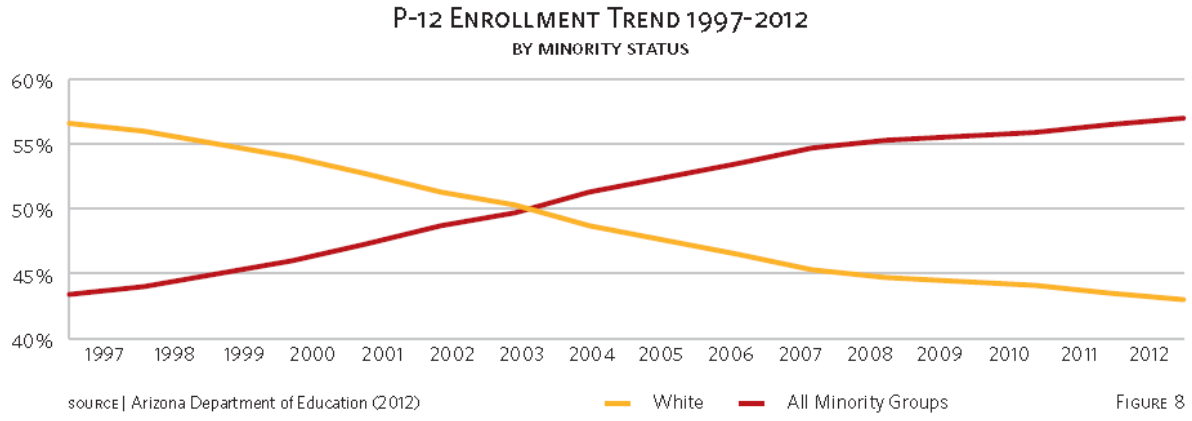
While graduation rates have been calculated using different methods over time and in various localities, the method used in the state of Arizona is based on the proportion of public high school freshmen that graduate with a regular diploma in four years, which includes the summer following twelfth grade. Thus, it provides a measure of the extent to which public high schools are graduating students within the expected period of four years, i.e. "on-time." The Arizona Department of Education also calculates the proportion of the ninth grade cohort that graduates in five years, but for the purposes of this document the four-year graduation rate will be used for all references, tables, and graphic displays.

For the Class of 2012, the graduation rate for all Arizona high schools stood at 76.7%. What this means is that, of the 77,247 students who were in the cohort group for the Class of 2012, 23.3%, or 18,039 students, failed to graduate in the expected four-year period.

Looking at the historical data on graduation rates in the state, we see that the yearly totals trended up only slightly from 2006 to 2012 despite the education community's efforts to keep students in school and increase the proportions of students receiving a high school diploma. In addition, graduation and dropout rates vary significantly among counties, across ethnic/racial classifications, socioeconomic groups, and other demographic characteristics.

Arizona is home to many students who are highly mobile and are typically considered "at-risk" for dropping out. While the Task Force does not believe that "poverty is destiny," it is important to consider who these students are and what external challenges they may face. While the proportions of White, Black, and Asian Pacific Americans are lower when compared to the rest of the nation, Arizona has nearly twice the proportion of Hispanics and four times the proportion of American Indians. Not surprisingly, this trend is also reflected in public school enrollment data. Figure 1 highlights the fact that Arizona's schools are already serving primarily minority students, yet these students graduate at a lower rate than their counterparts (See Figure 2, below).

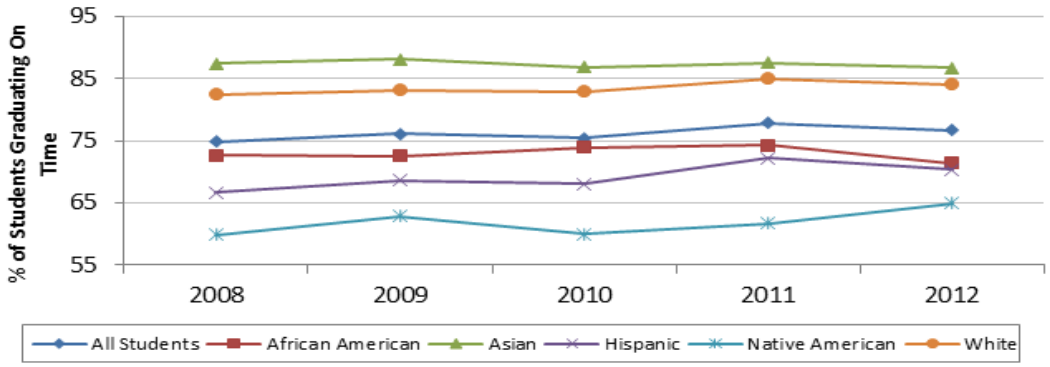
Figure 1. P-12 Enrollment Trend 1997-2012 by Minority Status



Source. Arizona Minority Student Progress Report, 2013, Arizona Minority Education Policy Analysis Center

In fact, for the class of 2012, only a little over 70% of all Hispanic students graduated within four years. This is especially troubling considering that in the 2012 Morrison Institute report, *Dropped? Latino Education and Arizona's Economic Future*, it is stated that "in the coming years, Latinos will provide an increasingly larger share of the state's leaders and workers, and will eventually comprise a majority of Arizonans…. Education and skills training are expected to become even more important drivers of workforce quality, earning potential and economic growth than they are today."

Figure 2. Arizona 4-year Graduation Rates for Racial/Ethnic Groups from 2008 – 2012



Source: Arizona Department of Education

The High Cost of Dropping Out

The impact to the individual student of not completing high school is both serious and long term. In Arizona, students who drop out of school before graduating earn nearly $7,500 less per year, are more likely to report poor health later in life, and are more likely to be institutionalized than their peers who finish high school.

Dropping out of school affects more than just the individual student. For example, lost earnings for the 25,600 students in Arizona who did not graduate from high school in 2011 total an estimated $3.1 billion. This is income that is lost to the state economy both as potential expenditures by wage earners and as lost tax revenue. In addition, Arizona could save as much as $265 million in health care costs over the lifetimes of each class of dropouts had they earned their diplomas. Finally, Arizona could see a combined crime-related savings and additional revenue of about $184 million each year, if the male high school graduation rate increased by just 5%.

Perhaps an even more compelling fact is that by 2018, it is estimated that about two-thirds of all available jobs will require postsecondary education or training. Increasingly, high school graduation is ***necessary*** but not ***sufficient*** to becoming a productive and engaged citizen.

Arizona's Response: The Arizona Ready Education Council's Graduation Rate Task Force

In order to meet the goals of the Arizona Ready Education Reform Plan, the Arizona Ready Education Council, in early 2012, formed the Graduation Rate Task Force, which is comprised of leaders in public education, business, and human services.

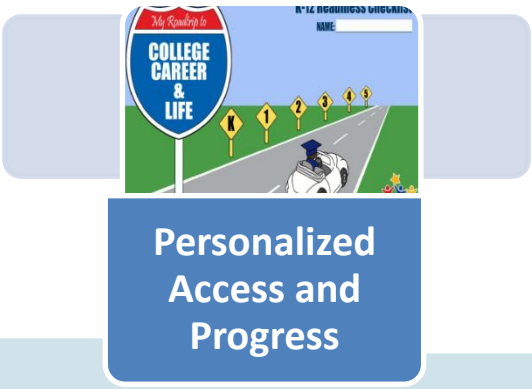
The task force met monthly for a little over two years and chose to focus on strategies that the members felt could be most effectively implemented in the State of Arizona. The result was seven key "white papers" or authoritative reports. The general conclusion of the papers was that there are clear opportunities to truly create a multi-faceted college- and career-ready foundation for all of Arizona's high school students and graduates that meets our state's diverse needs.

There are great opportunities to build on the current landscape of non-traditional models and grow Arizona's capacity for personalized access to and continuous progress through rigorous models. Students can choose pathways that best prepare them to be economically independent and successful based on their individual interest, aptitude, and knowledge.

Section 2: Redefining High School to Increase Arizona's Graduation Rate

Vision: Students enjoy personalized access to and continuous progress through rigorous models and pathways that best prepare them to be economically independent and successful based on their interest, aptitude, and knowledge and careers.

In order for all students to have customized, rigorous experiences in high schools, Arizona will need to consider restructuring high school systems to allow for greater flexibility in how course credits are earned and how to accommodate the needs of all students. This is particularly necessary for re-engaged students. Flexibility in this sense means providing ways for students to earn credits that are not based on "seat time" or the amount of time spent in the classroom. These might include the student demonstrating mastery of course content via high quality, authentic assessments, internships, distance learning, independent study, or service to the community.



Personalized Access and Progress

Choice belongs to the student – without caps or limits

The harsh reality is that the vast majority of students leaving high school are not ready to succeed in college or work. Today, most of our high schools and many of our students are not realizing the opportunity or taking responsibility for the significant transition about to take place in their lives.

The solution is to create a clear framework through which students have adequate information and opportunities to develop their own path, grow their potential, and find the value in their own education. Much like the well-used Starbucks analogy: customized opportunities, whether coffee or career pathways, provide great value to people.

Arizona has a key advantage over other states that are struggling with low graduation rates: we already have a culture of local control, open enrollment, and school choice. This culture has contributed to the creation of innovative partnerships between high schools, community colleges, and local employers including dual enrollment, internships, and career and technical education. Students are choosing these options and achieving both academic success and practical skills in "green" energy, information technology, and aircraft technologies – just to name a few. These students exit high school with options – start a well-paying job with potential growth, or head to postsecondary for additional academic education or training. However, these options are not widely known or widely employed across the state.

Thus, an important first step is to broadly disseminate the range of options and possibilities that are currently available – choices that expand opportunities through relevant content and appropriate rigor, and create access to a variety of "next-step" options.

Unfettered access to meaningful and engaging programs

In order to maximize and personalize options for students, respecting and reflecting the different needs and preferences of students, it becomes paramount to look at ways in which the current systems, rules and requirements

might unintentionally restrict "unfettered access." Examples might include limiting the number of Career and Technical education courses or on-line courses a student is able to take and what type of credit, academic or elective, is attributed to those courses. Additionally, most courses are taught in one way, in one predetermined amount of time, holding back students who can move through material more quickly while minimizing the learning of students who require more time to master a concept.

These gate-keeping points can end up forcing a student to stay in a program that does not work well for them and lead to their disengagement and possible dropping out.

With the development of vibrant education technology options and expansion of education delivery models, it is very possible to allow students to move through their coursework as fast or slowly as they need using the practical framework that makes sense for them. For example, a great deal of math and science can be learned through the lens of musical notation, construction of instruments, and acoustics for a student whose interest is music.

Beyond the current and standard topics and subjects that interest students, 21st century industries provide entrance into interesting fields of study currently familiar to only a few students and teachers. Thus, the ongoing engagement of Arizona's business community is pivotal in the development of access to this new, relevant content that expands and deepens the academic learning that students must master, including not only subject matter, but skills such as teamwork and effective communication. Their voice and involvement, in partnership with education experts, need to increase. They must provoke a different kind of conversation and bring different work concepts and experience into high school. This will create both a better understanding of jobs that are available and the skills needed to get them, as well as provide context for students and new avenues of interest to inspire them.

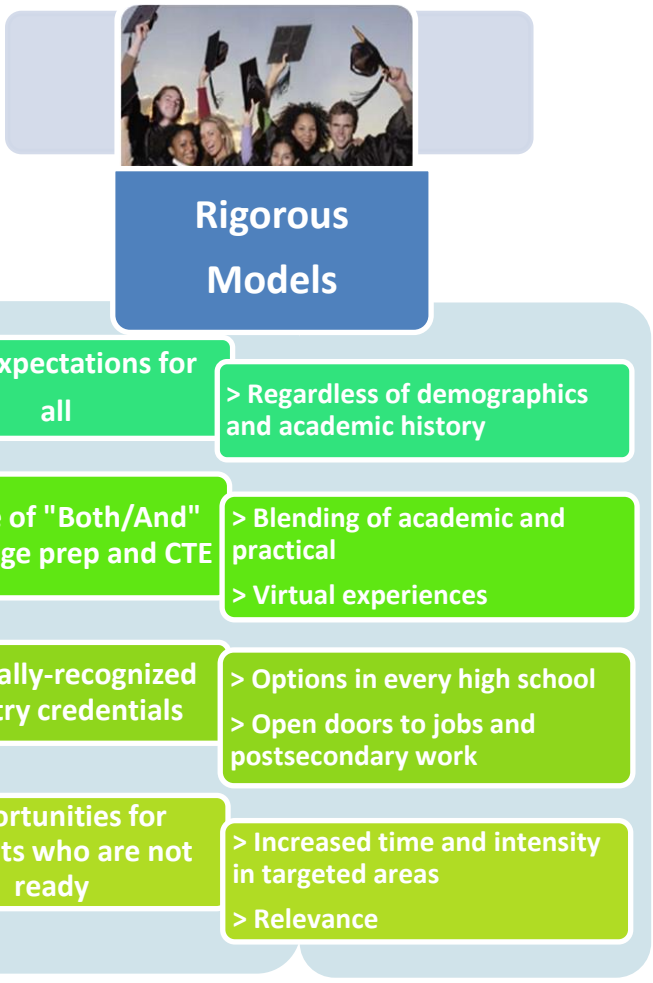
Flexible, quality options for re-engaged dropouts

According to the National Governors Association, "School structure is the greatest barrier standing in the way of schools and districts recovering out-of-school youth." The two ways to address this issue are to improve the quality of existing alternative high schools and afford greater flexibility in traditional high schools for dropouts to obtain the credits they need for graduation.

The National Governor's Association also recommends that states consider incentives to focus on dropout recovery – though this option is relatively high cost, at least compared to the others outlined in the document. However, it is effective in "jump-starting" a state's dropout recovery efforts. States considering this strategy have essentially two options: restructuring the state finance system or targeting additional resources. For the first option, a state would need to restructure their education finance system to provide additional resources to school systems based on the number of at-risk students and recovered dropouts. For the second option, a state could target additional resources, provided they are available, to dropout recovery by increasing the maximum allowable school attendance age or by creating incentive grant programs that target overage dropouts. There are examples of this being successful in other states, such as Texas. However, this policy is expensive and still does not address the factors that lead to dropping out in the first place.

In Arizona, the Alternative High School option was established in 1986 to re-engage students before or after they have dropped out. Arizona has 30,000 students in over 180 alternative schools. Many of these alternative schools provide rigorous examples of modified courses of study and techniques to address the needs of this unique population. All alternative schools are accountable through the state's letter grade system. In addition, about 120 alternative charter schools, two-thirds of alternative schools, are further held accountable through the Arizona State Board for Charter Schools.

Rigorous Models



High Expectations for All

One key study of students who drop out of school, *The Silent Epidemic*, found that two-thirds of students who had dropped out said they would have worked harder had more been demanded of them. Even a majority of students with low GPAs thought they could have graduated if they had tried. This suggests that high expectations are not just for the "college prep" academies across the state, but also quite necessary to keep students engaged in high schools regardless of demographics or prior academic history.

Culture of "Both/And" for college preparation and Career and Technical Education(CTE)

Currently a false dichotomy exists between "hands-on" and academic learning. Instead, students need access to models of delivery that works best for them, which could be a combination of delivery methods and approaches for an individual student. This includes academic pathways (what we think of as more traditional or education delivery models), and hands-on pathways (what we think of as CTE education delivery models). Models that combine rigorous academics and opportunities to be "hands-on" while applying academic content and skills can lead to a greater appreciation for the academic understanding of why things work the way they do. The availability of diverse education delivery modes and the ability to move between them will ensure greater flexibility and increased likelihood of student interest, academic success, and retention. This culture shift includes moving away from thinking of "hands-on" as being only related to manipulating tools and objects. In today's technology-rich culture, this can also include virtual experiences that simulate real-world activities which enhance the academic content – and vice versa.

The goal for students should be to open as many doors as possible and provide an entrance to the model they are ready for when they are ready for it.

CTE is sometimes perceived as not being academically rigorous. However, more and more, strong CTE programs, mainly delivered through Joint Technical Education Districts (JTEDs), provide both technical skills and strong academics. In fact, the National Research Center for Career and Technical Education has stated that the key to embedding academic rigor in a CTE course is to think of the course as neither a core academic nor a CTE course, but rather as a "Core Academic Area-in-CTE" course. An example of this is the "Math-in-CTE" course that is becoming common in many school systems.

Currently, the Arizona Department of Education (ADE) is identifying CTE programs for approval by the State Board of Education that contain sufficient academic content to be used toward the Board's English, mathematics, science, and economics credit requirements for graduation. The Arizona CTE Consortium, housed at the Pima County JTED, is also involved in the process of aligning core academic and CTE standards.

Additional models of rigorous delivery include dual enrollment in community college courses while in high school, early college and career high school models like the P-Tech model in New York, and other models such as those supported by Jobs for the Future that blend and blur the lines between high school and higher education.
To maximize student success, scalability, and sustainability, these innovations cannot happen in silos, but rather must be conceptually linked to broader concepts of flexible, practical pathways for students to efficiently gain both skills and academic knowledge.

Nationally-recognized industry credentials
One way to provide relevance in is to create stronger credentialing components. For example, programs of study, aligned with current and projected high wage labor market demand can allow students to learn enough content and demonstrate enough skill competence to be eligible for industry certified credentials, certificates, and degrees. Several examples exist in Arizona such as dual enrollment and "early college and career" high schools like GateWay Early College High School, which is located at and linked to GateWay Community College.

The Arizona Chamber of Commerce has started a workforce development project called the Arizona Manufacturing Partnership designed to link ADE's Career and Technical Education section and the Arizona Skills Standards Commission with the Arizona Commerce Authority's "sector strategies" which are industry sectors with high projected growth. This collaboration is designed to create industry credential programs in high schools that will provide the skilled, job-ready workers needed in these fields at the completion of high school. It is the prototype for additional skills training programs identified as likely high-wage, high-skill, and high-demand areas. Each of these programs has an industry advisory council which provides input on curriculum, equipment, internships, industry credentials, and job placement.

The goal should be to create a sense of urgency and inspiration to ensure that all students have access to programs of study aligned to industry-recognized credentialing opportunities, which open new doors for future postsecondary work and other high-skill, high-wage jobs.

Opportunities for students who are not college- and career-ready to become ready
Research has shown that the formula for helping those students who are not ready for college and a career is not simply to repeat the same content over and over. Rather, successful support for students who are not on a college- and career-ready path includes increased focus, intensity and time, such as meeting more often, for longer periods of time, and in a smaller group setting on a targeted topic with which a student is struggling. This approach could significantly reduce the number of students who are required to re-take an entire course with the same amount of time and same intensity as before with the hope that repetition will produce different results.

Thus, the graduation problem is rooted in systems that are outdated. The solution is not to create more rigid requirements and more traditional "seat time," but rather to inspire students to see the value of increasing their time and intensity for the topics in which they need help. This means that the recommendations in this report for expanded opportunity and flexibility are a tangible solution to remediating students who are not yet college- and career- ready.

Adults often assume students who are behind in high school simply will not move on to postsecondary opportunities. Instead we need to acknowledge the importance of a postsecondary option, providing students the often missing relevance and rigor, giving them a purpose, and propelling them out of high school. For those who are ready for postsecondary work, their senior year can accelerate along multiple paths. For those who are not, that time should be used to get help – not with simply graduating as the end goal, but by using the potential programs of study and expanded career-awareness to engage and motivate students to meet academic requirements.

Getting both high school and college credit in one course via dual enrollment on a high school campus and concurrent enrollment in a postsecondary setting can allow much of the remedial or even foundational postsecondary work that happens in the first years of college to happen earlier. If students see their high school years as a seamless link to postsecondary, the value of that time increases.

One example of a more flexible option is Move on When Ready – a performance-based high school education model that moves away from a "one-size-fits-all" approach. It includes multiple education pathways adapted to individual student interests and needs, and culminates in a new, performance-based high school diploma called the Grand

Canyon Diploma. Arizona is the first state in the country to pass performance-based learning legislation. One reason students give for dropping out is that they become bored. With performance-based or competency-based models, students can move at their own pace and achieve more, rather than being held back by traditional course progression. It should also be noted that role models and outside support can enhance motivation, vision, and sense of flexible opportunities. Families, schools, mentors, coaches, counselors, etc. all provide important feedback for students in both formal and informal ways. One often unacknowledged resource can be Out of School Time (OST) programs. Recent research has shown that participation in OST programs may increase school attendance, increase student engagement and motivation to learn, increase the likelihood of graduating from high school, increase and enhance self-esteem and social skills, reduce delinquency, and increase academic achievement in basic academic skills. Furthermore, students who participate in quality OST programs tend to be less likely to engage in risky behaviors and more likely to exhibit greater social competence. OST programs can also help a student find the relevance to the real-world so critical to high school completion.

Other successful programs that provide strong role models include Jobs for Arizona's Graduates and "foster youth" programs. Regardless of what type of program a family, school, or district chooses, the goal is to ensure that all students have an opportunity to learn the value of their education.

Pathways based on interest, aptitude, and knowledge

More flexible modes and models of delivery

Flexibility for students also means that they can enter and exit different industry-aligned programs of study while still covering academic content that will support the attainment of credentials, 2-year and 4-year degrees and beyond. Often this includes specific tiers, or entry and exit points, that allow them to achieve a certain amount of knowledge and a basic credential, explore a different option, and then reenter for additional training when the timing is right for them. Such an example might be for a student to become an energy management technician while still in high school, and have a pathway to become a nuclear engineer.

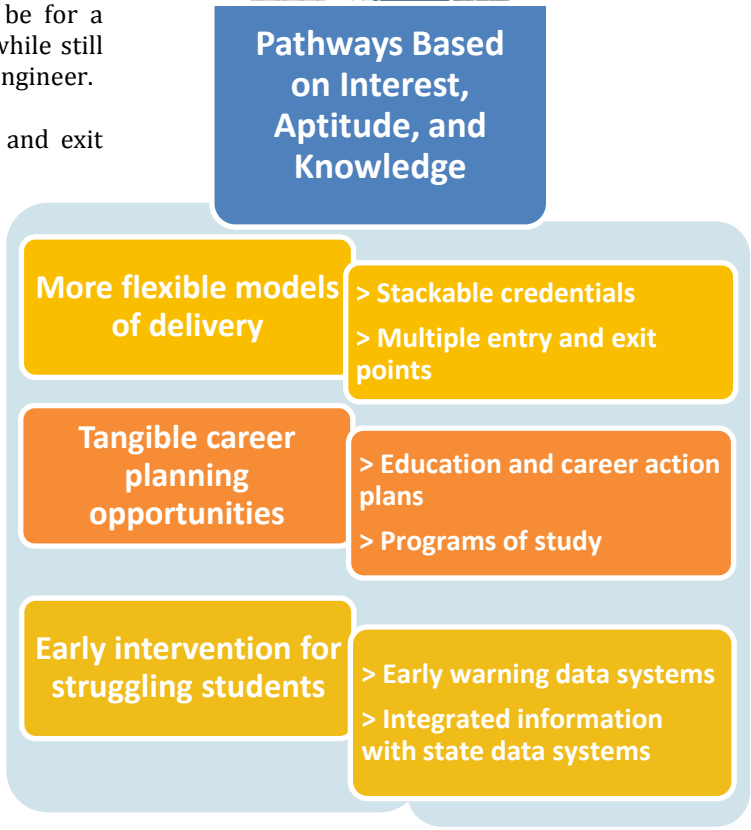
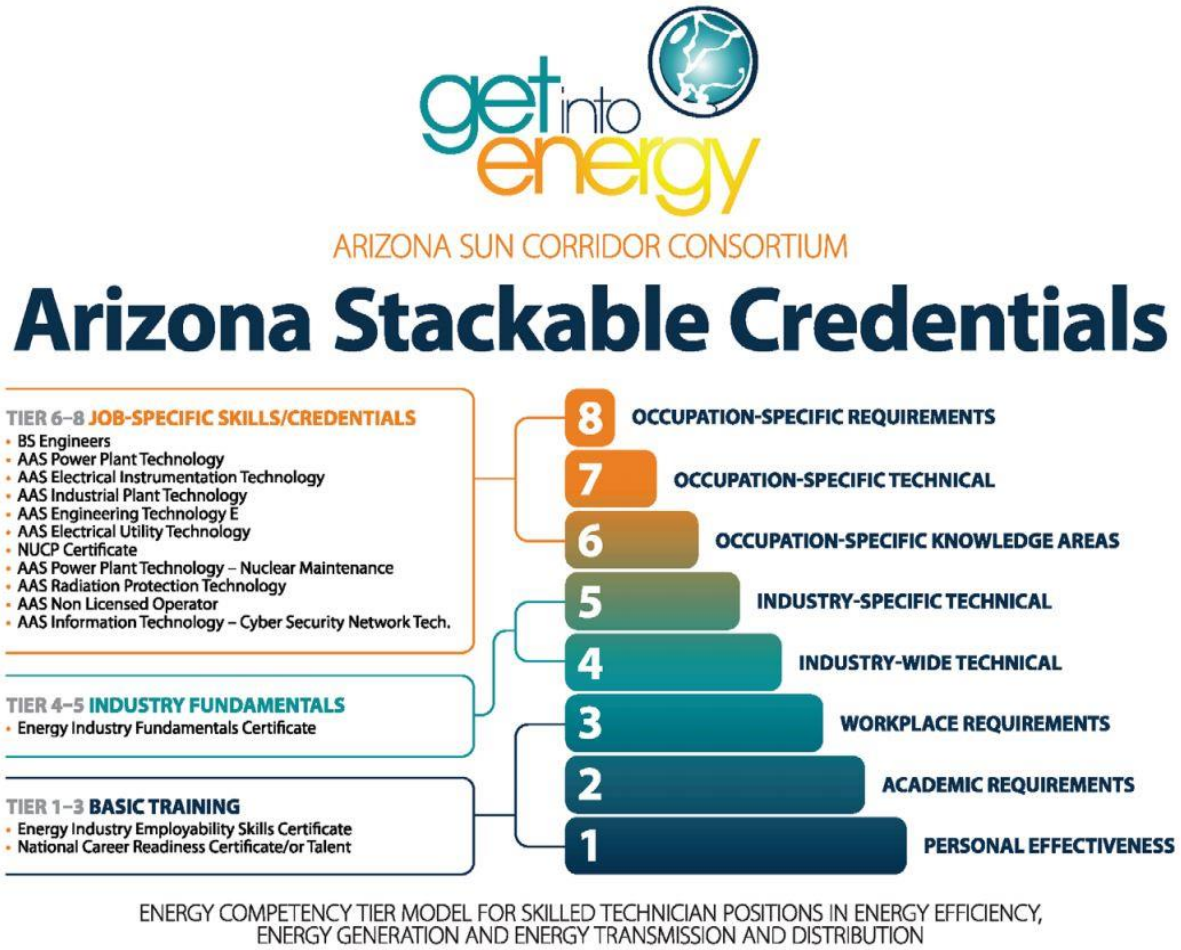


Figure 3, on page 10, shows a particular set of entry and exit points for energy sector training and jobs.

Stackable credentials such as these can provide options for a student to develop at their own pace while still benefiting from the "economies of scale" in a systematic approach to the credential and access to educational content. Again, these require clear lines of communication between education providers and employers to ensure that these programs are rigorous, accessible, and engaging for students.

Figure 3: Example of Stackable Credentials



Another example stems from over ten years of work by Jobs for the Future which helps states implement early college and career high schools that offer career pathways aligned to labor market needs for grades 9-14 that are connected to 4-year programs of study. For example, a career academy or a comprehensive program of study that includes all the requirements for completing a high school diploma as well as a postsecondary credential with value in the labor market.

Tangible career planning opportunities

An Education and Career Action Plan (ECAP) is a formal plan and a process that students use to clarify their career goals and refine their postsecondary plans. ECAPs provide a tremendous opportunity for a student and family, or other adult mentors, to plan a program of study that gives students the academic content they need via aligned and connected content courses throughout their high school years. With support from school counselors, teachers, and parents, the ECAP helps students make decisions about the courses and activities they choose throughout high school and beyond. The ECAP empowers students by giving them an opportunity to plan their education around their specific interests, skills, and aspirations.

Ideally, the ECAP process begins in middle school and is updated on a yearly basis throughout high school and postsecondary education. Although plans vary across the state, most include the following: academic and career information and goals, postsecondary information and options, and documentation of extracurricular opportunities.

The Arizona State Board of Education currently requires students in grades 9-12 to complete an ECAP with a six-year plan that a parent reviews and signs each year. However, at this time, the ECAP requirement is a State Board of Education policy and is not in state statute.
Despite this important tool, many parents and students are unaware of its intent and potential value. This is due to a lack of available school staff time to help students develop the ECAPs, lack of expertise by staff in developing the ECAPs, lack of information about the benefits of ECAPs to schools and the business community, lack of information on the extent to which ECAPs are being developed and used in schools, and lack of Arizona Department of Education staff to fully develop integration tools.

ECAPs have been used in a variety of adult education and public school settings, and they have been found to be an effective tool in keeping students engaged and in helping them see the relevance of their coursework and other learning activities. Since a perceived lack of relevance and real-world utility of some high school courses has been shown to be one major reason students begin to think about dropping out of school, ECAPs should be seen as an important tool or strategy for keeping students in school.

In addition, a program of "career study" is a valuable concept that should be developed allowing for personalized progression through academic and real-world content as early as fourth grade. Typically, grades 4-6 might include career awareness in every academic class, where every lesson ends with "who uses this to solve what problems?" In grades 7-8, career exploration deepens through field trips and deeper employer engagement, often presenting students and teachers with information on industry segments and jobs in those segments. Grades 9-14 are "career preparation," where students can choose courses that provide academic rigor and more specialized content simultaneously. The goal is not to force a student into a pre-determined job track, but to provide relevance and expanded awareness of all the opportunities that exist when a student successfully graduates from high school.

Expanding ECAP and programs of study also requires deeper involvement from the business community in both helping schools understand a proper program of study that leads to various careers and ensuring that information about their industry is included in the information system students use to develop their ECAPs.

Early identification and intervention for struggling students
Since many students drop out at the end of eighth grade or during the first few weeks or months of ninth grade, the identification of potential dropouts during the middle school years or earlier is critical. Middle school students who have multiple low or failing grades, poor school attendance, or multiple disciplinary incidents are significantly more likely to drop out of high school. A robust "early warning data system" can provide links between high school, the earlier grades, and the state's early childhood data system.

Perhaps the most promising development in the state in the use of early warning data involves a partnership between the Phoenix Union High School District, the Phoenix Elementary School District and the Valley of the Sun United Way. The goal of the partnership is to develop a technology system that will provide early warning indicator data to school and district staff. The system will also provide a means to plan and manage student interventions by school staff.

On a state level, the development of a Statewide Longitudinal Data System has been a key priority for Governor Brewer and Superintendent Huppenthal. At its full capacity, this system should be a key communication link between parents, teachers, and administrators to identify risk factors and interventions.

Section 3: Foundation – Higher Quality Early Childhood Experiences

The National Governor's Association has stated,

> "To effectively prepare students for college or career training, practitioners, policymakers, and researchers increasingly recognize that all children need a clear progression of high quality learning experiences starting early in life. A growing body of research shows that mastery of foundational cognitive and social-emotional skills from B-3rd grade is particularly important for students' long-term academic success."

The linkage between early childhood learning and later success in school has been shown repeatedly in research literature on dropout prevention and postsecondary education and workforce readiness. Through advances in neuroscience, it is clear that the early years are a time of unprecedented brain development. The early years (birth to five) are crucial for setting the foundation for the development of language, reasoning, literacy, and emotional skills necessary for success. Many organizations have cited this research when advocating for access to higher quality preschool and early elementary school experiences for children.

In addition to gaining cognitive knowledge, early learning programs help children develop social skills such as cooperating, making friends, and accepting new responsibilities, as well as skills such as listening, working with a group and following directions. These skills are much better developed in the early years and are essential to success in school. In addition to literacy, quality early learning programs build important skills in math and critical thinking. They also foster children's love of learning by encouraging exploration, creativity, and problem-solving.

In spite of this, most states have not started the task of creating a coherent learning pathway beginning in early childhood culminating in the acquisition of critical early language, literacy, and mathematics skills by the end of third grade. Often, the fragmented nature of state administration and policy leadership for early childhood and K-3 public education programs have made the alignment of learning standards, assessments, and teacher qualification criteria difficult, if not impossible. Without this alignment, children are more likely to come to kindergarten or first grade having had varying experiences that could provide them with the social, emotional, and cognitive skills to be successful. Children who are prepared when they enter kindergarten consistently outperform their less prepared peers academically by third grade.

Arizona faces challenges related to young children's preparation for early grade success. These include:

- Only 10% of the infant and toddler learning programs in the state have national accreditation, and only 20% of the early learning programs are enrolled in Quality First, Arizona's quality rating and improvement system;
- Arizona currently ranks 49th, nationwide, in the percentage of children ages three and four attending preschool;
- Arizona does not currently have a common, statewide screening or entry assessment for children entering kindergarten;
- About 148,000 (27%) of Arizona's children under three live in poverty and 131,000 (24%) of Arizona's children from three to five years of age live in poverty;
- About 169,000 (31%) of Arizona's children live in families where both parents work and 142,000 (26%) of Arizona's children live with a single working parent;
- It is estimated that up to 312,000 (57%) of Arizona's children from birth to age five spend time in out-of-home settings while parents work.

Arizona currently has a number of organizations and programs working to improve the accessibility and quality of early childhood programs and to create a coordinated and aligned system of standards, assessments, and professional development between birth to five programs and grades K-3. These include:

Organization	**Focus**
Arizona Ready	To outline statewide education reform that includes early childhood/early primary within a P-20-Workforce continuum of support
First Things First	To expand access to early childhood supports for children and families, to create synergy among state agencies and departments, and to demonstrate public will for change
Build AZ	To support the continued development of a birth to eight coordinated system of programs, policies and services that respond to the needs of families
Read On Arizona	To implement a statewide plan to create an aligned continuum of programs and services for early language and literacy development for children and families birth to eight
Arizona Department of Education	To align early learning standards, infant/toddler standards and Head Start standards with Arizona's College- and Career-Ready Standards

The development and implementation of the Arizona Kindergarten Development Instrument to assess the readiness skills of children for Kindergarten and to inform educators about the best approach to provide individualized instruction for students enrolled in Kindergarten and first grade is critical for identifying and addressing learning issues before a student becomes disengaged. As the saying goes, an ounce of prevention is worth a pound of cure. In this case, it can lead to lasting educational and economic success.

It should be noted that Arizona still has more work to do in defining the state's role in ensuring that high quality, voluntary early childhood programs are available to preschool aged children in Arizona. We cannot shy away from this conversation, but must approach it with a sense of practical awareness of the effects of early learning along with very real fiscal constraints.

Section 4: Conclusions

It has now been three years since Governor Brewer set the goal of raising the state four-year graduation rate to 93% by 2020. From 2006 to 2012, the last year for which data is available, the rate increased by approximately 8%. Even if, in the next 7 years, this trend continues, the 2020 rate would fall short of the Arizona Ready Education Council's target. It is apparent that additional measures will be needed in order to meet the goal.

So, what could decision-makers, at the state and local levels, do to raise Arizona's graduation rate?

The key areas of focus should include the following:

Personalized Access and Progress

1. Increase the number of Arizona high schools providing flexibility in the awarding of course credits (competency vs. seat time)
2. Expand dual-credit, concurrent enrollment, and industry credential programs – with no cost to the student – for earned credit

Rigorous Models

3. Expand the number of state-approved CTE programs for core academic credit
4. Provide incentives to expand effective drop-out prevention and recovery programs

Pathways Based on Interest, Aptitude, and Knowledge

5. Provide a process by which information from the Arizona Commerce Authority, business, and industry on strategic "areas of growth" is made available to schools and school systems
6. Provide supports for schools to fully implement Education and Career Action Plans
7. Create early warning data systems within and between districts with high dropout rates

Higher Quality Early Childhood Experiences:

8. Support the development and implementation of a Kindergarten readiness assessment tool that will help teachers develop individualized instruction for Kindergarten students
9. Provide for more high-quality, voluntary education programs to preschool aged children in the state

Great collective impact can be made even without state-level policy decisions. It will come by collectively setting goals, leveraging existing initiatives, and forming strategic partnerships. Organized voices can take action now to expand opportunities for students, without legislation, regulation, or a budget change to move forward. They only require human capital, leadership, and community support.

A good way to start is to examine current business-education partnerships and to ask the appropriate questions to expand on these opportunities. It is critical to know what pathways schools currently offer students in order to identify new pathways that could be introduced and how the surrounding business community might assist in enhancing those pathways. Likewise, the business community should identify key areas in which it can provide work-like experiences for students. Once schools and businesses take the time to have these discussions, meaningful collaborations can begin forming that open up new doors and opportunities for students.

We must continue to forge a culture of high expectations and achievement for ***all*** students because they will rise to the challenge. We should clearly articulate the purpose of high school, show students what opportunities exist, and help students to understand the career pathways that are open to them for a successful future.

In addition, we should take advantage of innovative models and bring in experts and practical partners to help enhance existing and develop new viable, sustainable options for all students.

In short, we should redefine high school to greatly increase the graduation rate, while also preparing far more students for college and a career. Many key stakeholders, quite a few of which are represented on the Graduation Rate Task Force and the Arizona Ready Education Council are poised to move these discussions into action and grow opportunities for all Arizona students.

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The Governor's Office of Education Innovation thanks the members of the Arizona Ready Education Council's Graduation Rate Task Force for their time and expertise.

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